National Electronic Disease Surveillance System (NEDSS)

I. Glossary of Selected Terms

American National Standards Institute (ANSI): A voluntary standards organization that serves as the coordinator for national standards in the United States and the U.S. member body to the International Organization for Standards. ANSI accredits standards committees and provides an open forum for interested parties to identify, plan, and agree on standards; it does not itself develop standards. Standards are developed by Standards Development Organizations (SDOs).
URL: http://www.ansi.org

Common Information for Public Health Electronic Reporting (CIPHER): A set of standards and guidelines for data representation and code values which includes specifications for representing concepts as well as standard code lists for coded elements. The CIPHER standards can be linked directly to attributes in the PHCDM.
URL: http://www.cdc.gov/od/hissb/docs/cipher.htm

**Note: *The CIPHER document was developed early in the NEDSS process and was oriented toward a preliminary architecture. The data variable specifications for the core demographic variables in the Base System will supercede the CIPHER document.*

Electronic Data Interchange (EDI): A standard format for exchanging business data. An EDI message contains a string of data elements, each of which represents a singular fact, such as a price, product model number, and so forth, separated by delimiters (a character that identifies the beginning and end of a character string). The entire string is called a data segment. EDI is one form of e-commerce, which also includes e-mail and fax.

Electronic Laboratory-based Reporting (ELR): Electronic Laboratory-Based Reporting (ELR) is the transmission of data of public health importance from clinical laboratories to public health agencies in electronic format. Ideally, data transmitted by ELR would be automated and would use standardized codes for tests and results allowing for more timely and complete reporting.

Health Level 7 (HL7): A standards development organization formed in 1987 to produce a standard for hospital information systems. HL7 received ANSI accreditation as an Accredited Standards Developing Organization in 1994. The HL7 standard is an American National Standard for electronic data exchange in health care that enables disparate computer applications to exchange key sets of clinical and administrative information. HL7 is primarily concerned with movement within institutions of orders; clinical observations and data, including test results, admission, transfer and discharge records, and charge and billing information (coordinating here with X12). HL7 is the selected standard for the interfacing of clinical data for most health care institutions.
URL: http://www.hl7.org

Health Insurance Portability and Accountability Act (HIPAA): The Administrative Simplification provisions of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) are intended to reduce the costs and administrative burdens of health care by making possible the standardized, electronic transmission of many administrative and financial transactions that are currently carried out manually on paper.
URL: http://aspe.os.dhhs.gov/admnsimp/index.htm

International Organization for Standardization (ISO): A worldwide federation of national standards bodies from some 100 countries, one from each country. Among the standards it fosters is Open Systems Interconnection (OSI), a universal reference model for communication protocols. Many countries have national standards organizations, such as the U.S. American National Standards Institute (ANSI), that participate in and contribute to ISO standards development.
URL: http://www.iso.org

Logical Observations, Identifiers, Names, and Codes (LOINC): The LOINC database provides a set of universal names and ID codes for identifying laboratory and clinical observations. The purpose is to facilitate the exchange and pooling of clinical laboratory results, such as blood hemoglobin or serum potassium, for clinical care, outcomes management, and research.
URL: http://www.mcis.duke.edu/standards/termcode/loinc.htm

National Committee on Vital and Health Statistics (NCVHS): External Advisory Committee to the Secretary of the Department of Health and Human Services (DHHS), and to the DHHS Data Council. Consists of 16 members with overlapping four-year terms. The National Center for Health Statistics (NCHS) serves as Executive Secretary. The NCVHS was established in 1949 in response to a recommendation by the World Health Organization (WHO). The committee was re-chartered in January 1996 to include a more direct focus on data standardization and privacy activities.

Secure Data Network Standards and Procedure (SDN): Agency standards and operating procedures for the use of CDC/ATSDR Internet resources in the secure transmission and processing of sensitive or critical data and the support of sensitive or critical systems.
URL:http://www.cdc.gov/od/hissb/docs/sdn3.pdf

Systemized Nomenclature of Medicine (SNOMED): A structured nomenclature and classification of the terminology used in human and veterinary medicine developed by the College of Pathologists and American Veterinary Medical Association. Terms are applied to one of eleven independent systematized modules.
URL: http://www.snomed.org

Unified Medical Language System (UMLS): Developed by the National Library of Medicine as a standard health vocabulary that enables cross-referencing to other terminology and classification systems. Includes a metathesaurus, a semantic network, and an information sources map. Purpose is to help health professionals and researchers retrieve and integrate electronic biomedical information from a variety of sources, irrespective of the variations in the way similar concepts are expressed in different sources and classification systems. Has incorporated most source vocabularies.
URL: http://www.nlm.nih.gov/research/umls/

World Wide Web Consortium (W3C):   An industry consortium that seeks to promote standards for the evolution of the Web and interoperability between WWW products by producing specifications and reference software.
URL:http://www.w3.org/

X12: A standards development organization that develops uniform standards for inter-industry electronic interchange of business transactions-- electronic data interchange (EDI). X12N, a subcommittee of X12, develops standards for healthcare insurance and claims processing.
URL: http://www.disa.org/

eXtensible Markup Language (XML):   A specification developed by the World Wide Web Consortium. XML is designed especially for Web documents. It allows designers to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and between organizations. XML provides a file format for representing data, a schema for describing data structure, and a mechanism for extending and annotating HTML with semantic information.
URL: http://www.w3.org/

II. Glossary of Data Modeling Terms

Association: An association is a structural relationship that specifies that instances of one thing are connected to instances of another.

Attribute: The specific items of data that can be collected for a class.

Class: A description of a set of objects that share the same attributes, relationships, and semantics.

Data Model: A framework for the development of a new or enhanced application. The purpose of data modeling is to develop an accurate model, or graphical representation, of the client's information needs and business processes.

Datatype: A specification of the allowed format for the values of an attribute. Examples include string, number, code, and text.

HL7 Reference Information Model (HL7 RIM): A conceptual model that defines all the information from which the data content of HL7 messages is drawn. **URL: http://www.hl7.org**

Process Model: A framework describing the activities, functions, and processes of an organization. Processes in a process model are often defined in terms of their inputs and outputs. Process models often accompany data models; a data model does not reflect any action or flow of information and presents only a static view of data.

Public Health Conceptual Data Model (PHCDM): A high level conceptual model, developed as part of the CDC NEDSS initiative, which provides the foundation for standardization of public health data collection, management, transmission, analysis and dissemination.

Subject Area: A way of organizing classes into groups within a model, where classes grouped together into higher-level units. Within the UML, a subject area is referred to as a package.

Subtype: A specialization of another class, which inherits the attributes of its parent class.

Supertype: A generalized class that is related to subtypes that inherit its attributes.

Unified Modeling Language (UML): A graphical language for visualizing, specifying, constructing, and documenting the artifacts of a software-intensive system.
URL:http://www.omg.org/uml/

III. Some websites with information technology glossaries that may be of use:

http://www-rohan.sdsu.edu/glossary.html

http://www.state.ia.us/government/iitt/glossary.htm

http://www1.umn.edu/enterprise/glossary.html